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(54) Production of products from a dough strip

(57) The products can be made from a starting material which has a thickness between 1 and 2 mm such that the disadvantages which are inherent in the use of thick baked dough strips having a high sugar content are avoided. In the process, a pourable dough, preferably a wafer dough having a high sugar content, is continuously baked to form a continuous strip (3), which is plastically deformable when it is still warm. While it is in its plastically deformable state, the strip (3) is folded to form a laminated baked strip (5) having at least two plies. The laminated baked strip (5), which is still warm and plastically deformable, is processed further to form the products desired.

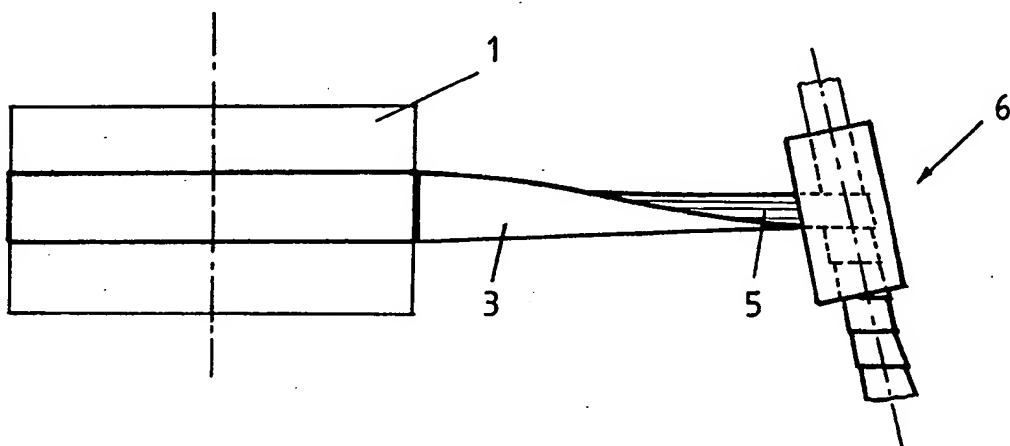


FIG. 2

FIG. 1

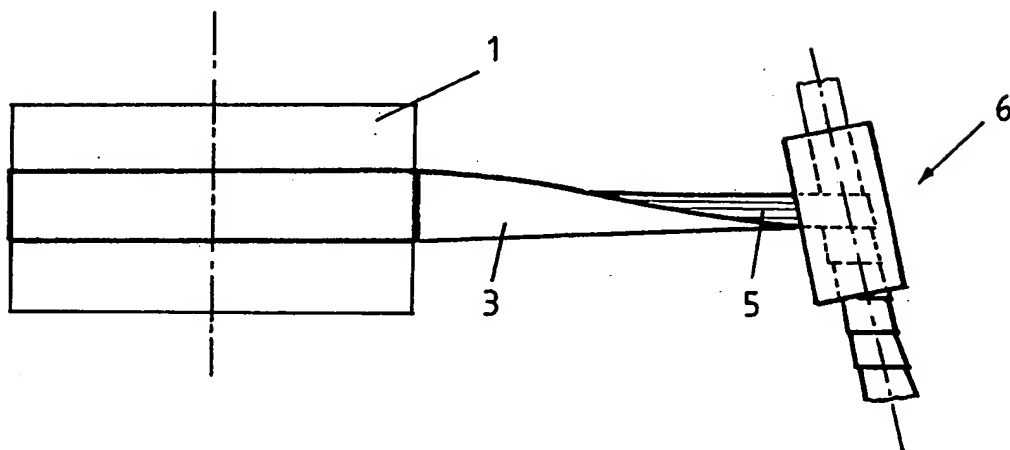
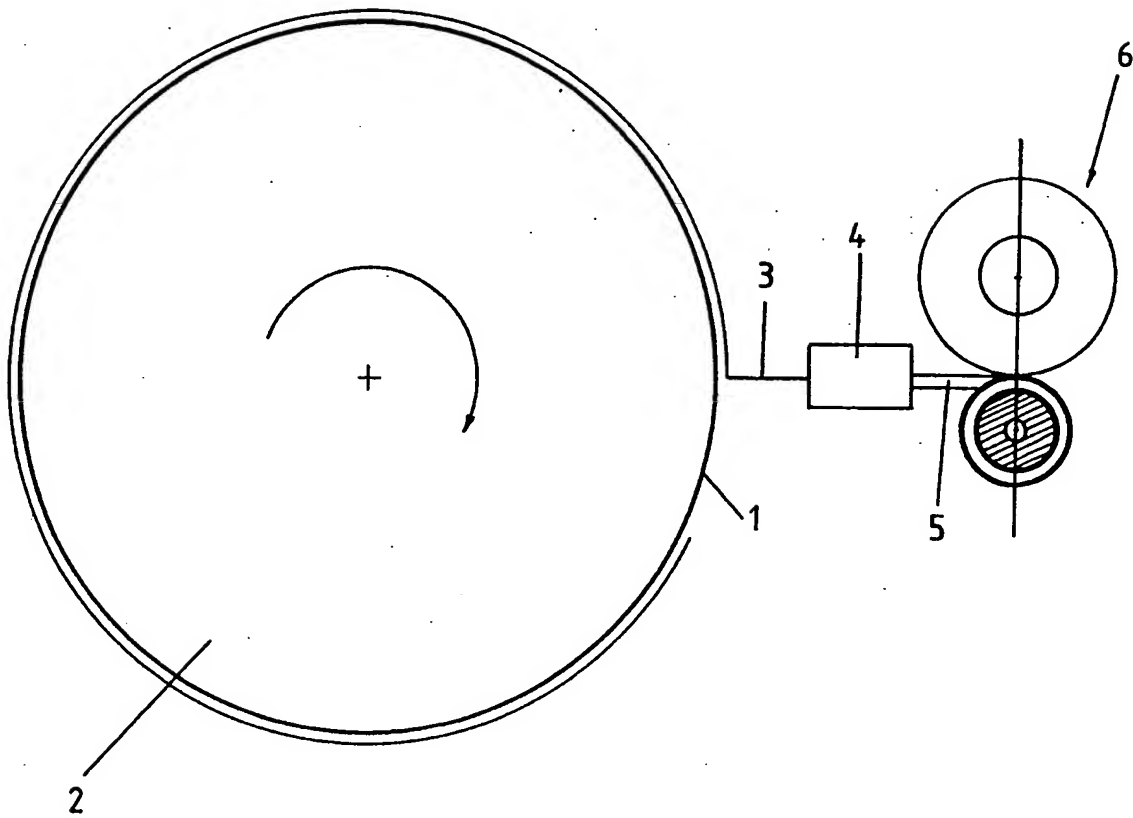


FIG. 2

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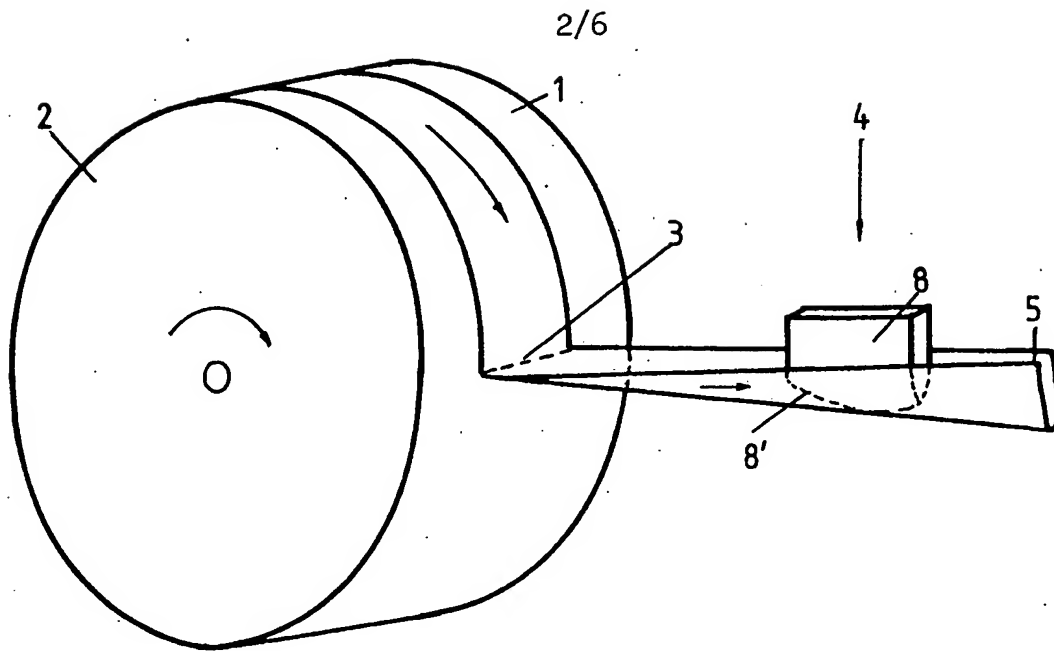


FIG. 3

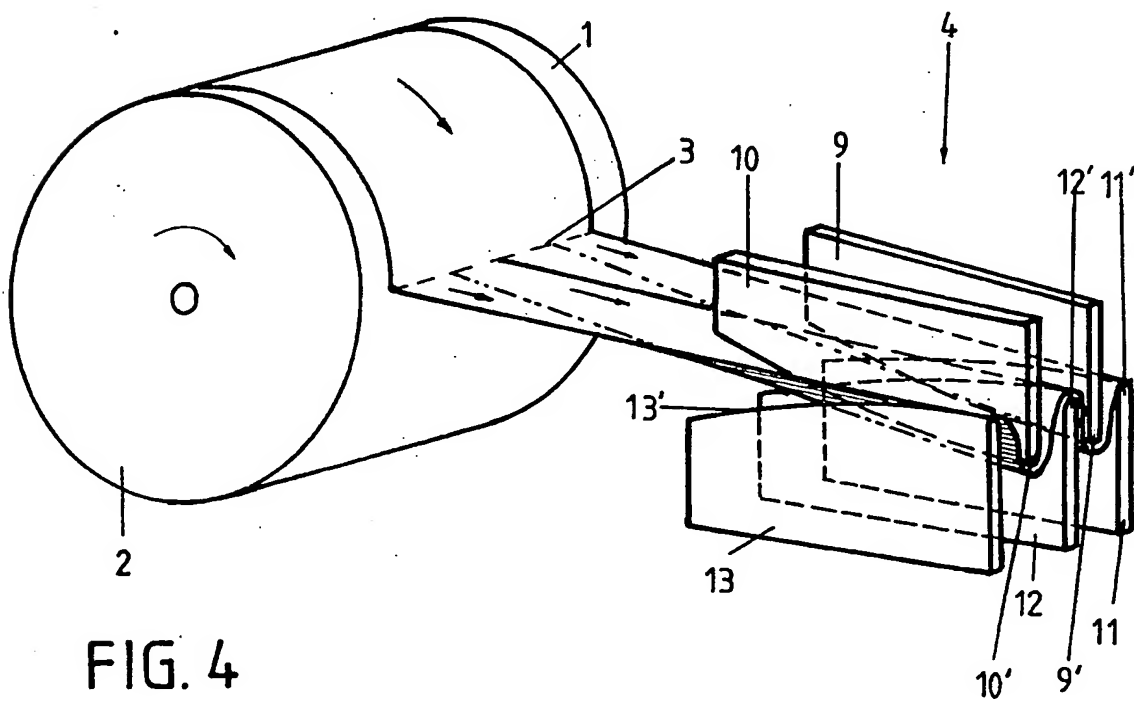


FIG. 4

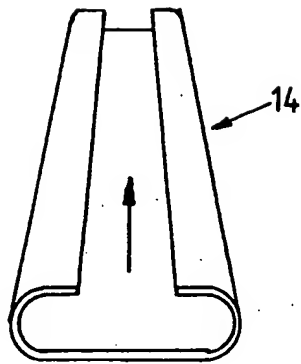


Fig. 5

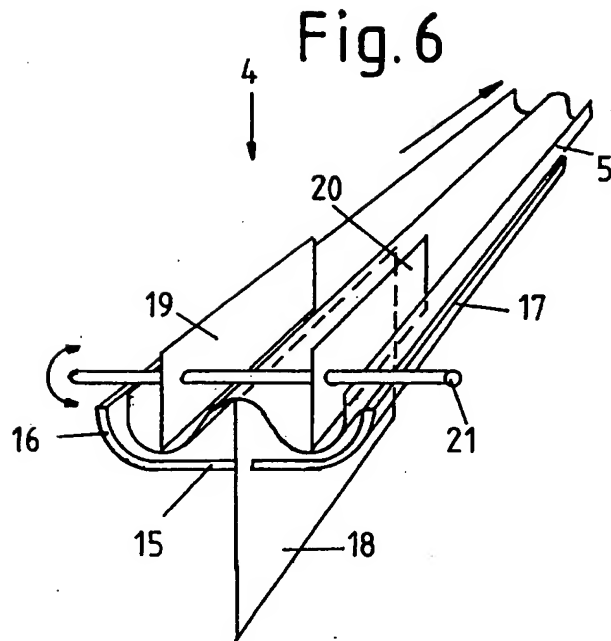


Fig. 6

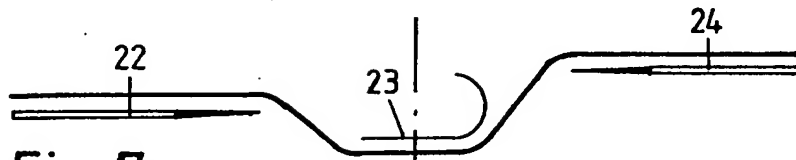


Fig. 7a

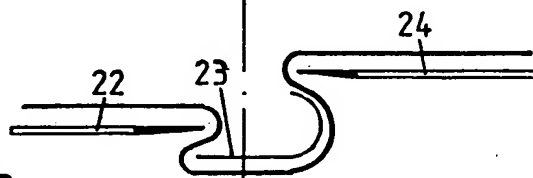


Fig. 7b

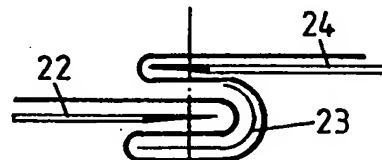


Fig. 7c

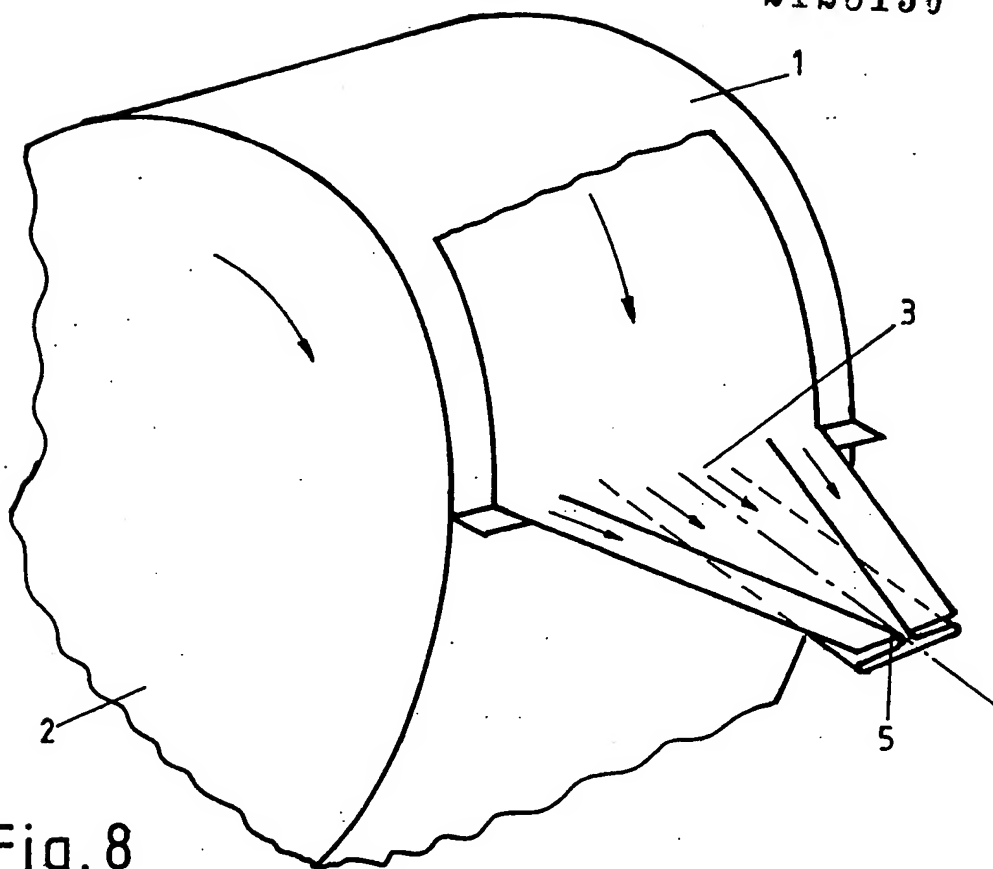


Fig. 8

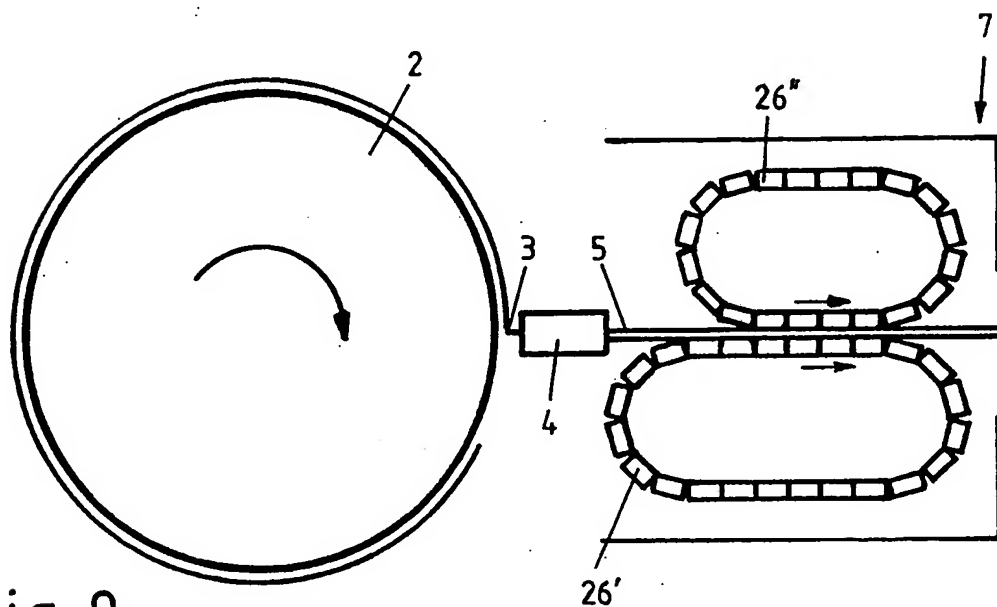


Fig. 9

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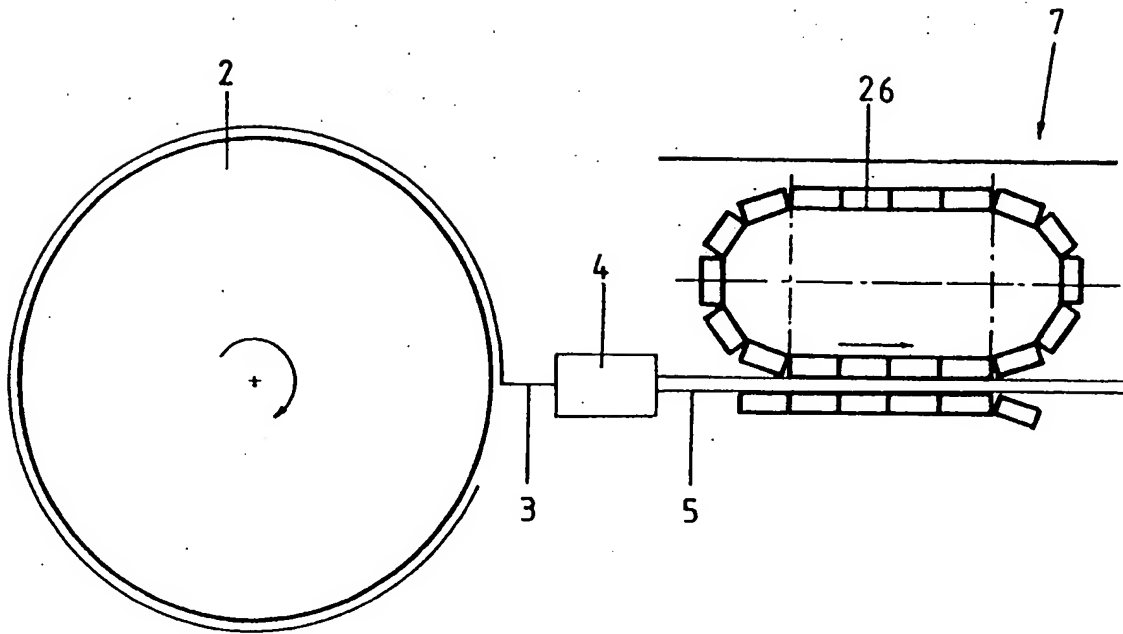


FIG. 10

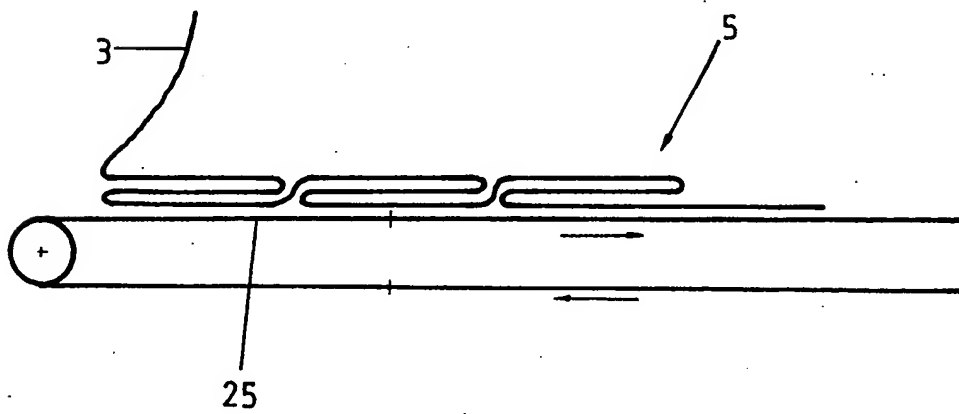


FIG. 11

FIG.12

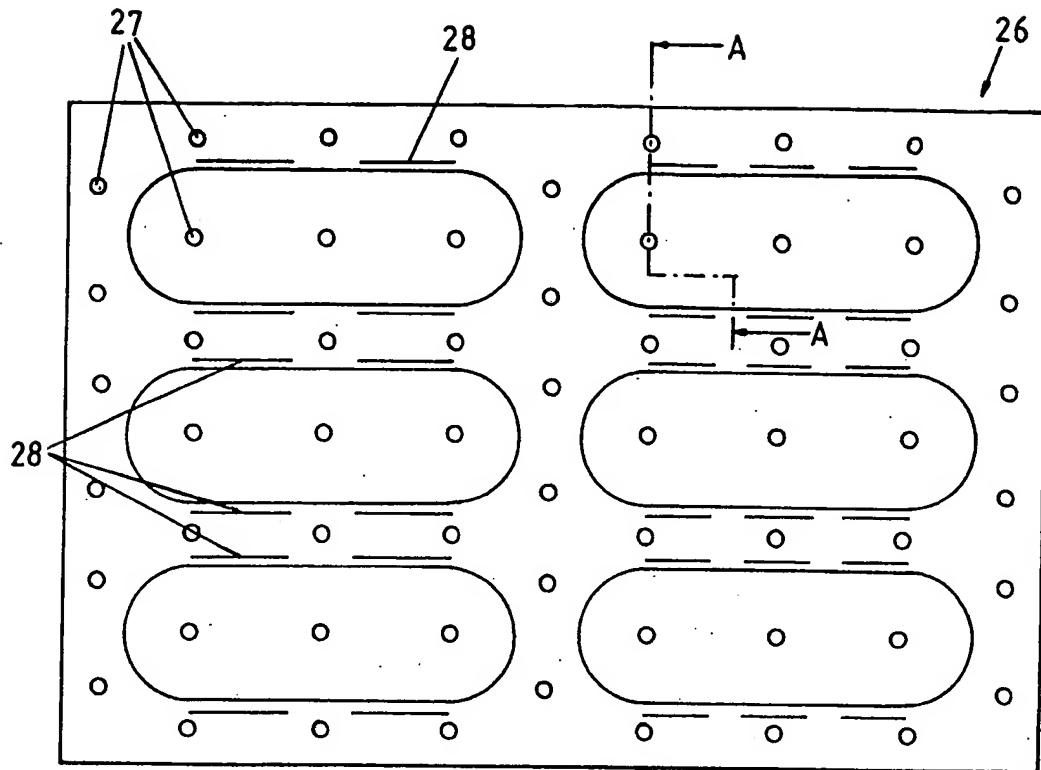
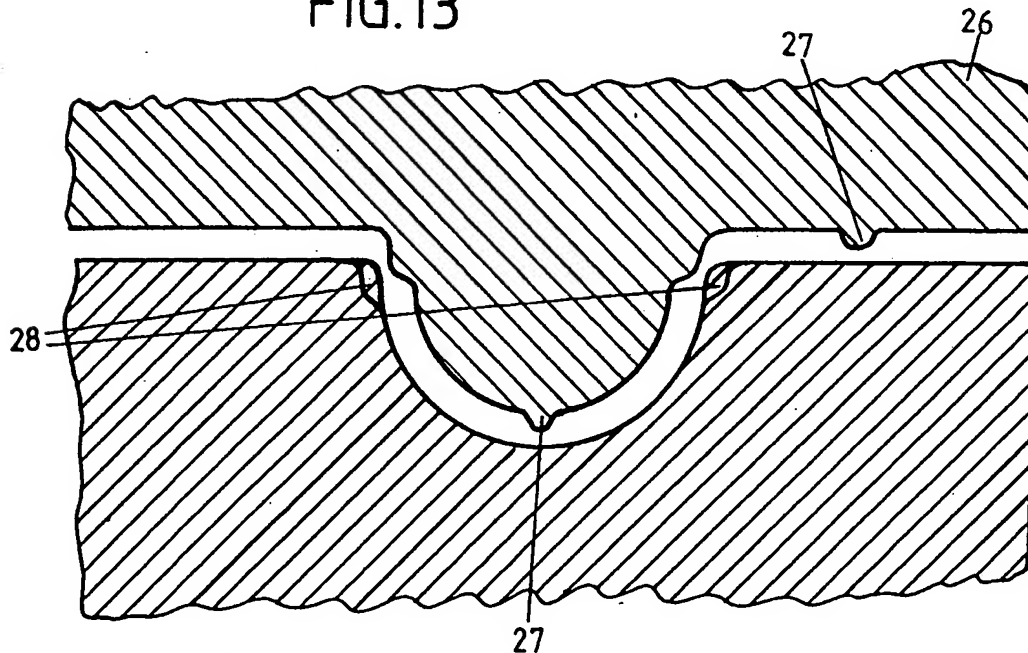


FIG.13



SPECIFICATION

Production of products, such as hollow bodies, coherent portions of hollow bodies, portions of hollow bodies which are connected by flat webs or the like, cups, flat discs, rolls and the like, from a baked strip, preferably from a wafer strip

This invention relates to the production of products, such as hollow bodies, coherent portions of hollow bodies, portions of hollow bodies which are connected by flat webs or the like, cups, flat discs, rolls and the like, from a baked strip, preferably from a wafer strip.

In the formation of hollow wafer bodies, such as nut-shaped, almond-shaped, ball-shaped or the like hollow bodies, it is known to bake in the baking tongs of an automatic wafer-baking oven a plurality of low hollow wafers consisting of hollow body halves, which are interconnected by webs. The baking plates of the baking tongs are provided with depressions and elevations, which correspond to the respective hollow body halves. Liquid wafer dough having a low sugar content is charged onto the lower baking plates of the baking tongs. Thereafter the baking plates are swung toward each other to close the baking mold for the low hollow wafers. The vapor pressure generated in the dough forces the latter against the walls of the mold so that a hollow wafer is formed, which conforms to the mold and can be removed as a finished wafer from the baking tongs when the baking process has been completed. The hollow wafer has a smooth surface and a porous internal structure, which is crisp and tender when the wafer is being eaten. The removal of the hollow wafer from the baking tongs is facilitated by an addition of some fat to the wafer dough, which contains also flour and flavours. Sugar can be added only in a small quantity, which usually does not exceed 10% of the dry weight of the dough, because a larger amount of sugar would caramelize during the baking process so that the hollow wafers would stick to the molds or baking tongs. The hollow body halves baked as low hollow wafers and the flat wafer webs connecting those halves have the crisp, brittle, fragile consistency which is typical for wafer sheets and owing to their low sugar content (not in excess of 10% of the dry weight of the dough) cannot be deformed further in a warm state, just as the wafer sheets. Hollow body halves which have thus been baked are then punched from the low hollow wafers and may optionally be filled and are then assembled to form whole hollow bodies.

In the production of wafer rolls or hollow sticks it is known to pour liquid wafer dough having a high sugar content of 15% to 70% of the dry weight of the dough onto a heated baking drum of a continuously operating wafer-baking machine and to bake said dough on the baking drum to form a continuous baked strip, which is poured in a hot, plastically deformable state from the baking drum and is helically wound with overlapping convolutions on a winding mandrel, which extends at an acute angle to the baking drum, to form a continuous tubular hollow body. When that hollow body is still in a

plastically deformable state, it is cut into discrete pieces of predetermined length, i.e. into wafer rolls or hollow sticks. The baked strip is wound in a roll-forming mechanism between the winding mandrel and a feed roller, which urges the baked strip against the winding mandrel and advances the baked strip along the winding mandrel. Because the winding mandrel can be supported only at one end, the self-supporting mandrel portion which co-operates with the feed roller can have only a limited length. This involves a limitation of the width of the baked strip which can be processed by the roll-forming mechanism and of the weight rate at which the hollow bodies can be produced. The hollow bodies made in that manner can be deformed, e.g., flattened, as long as they are plastically deformable. The resulting pieces of baked ware have a brittle, lamellar structure. Baked dough strips having a high sugar content and a thickness between 0.2 and 0.5 mm have previously been used to make the wound bodies. Thicker baked dough strips have not been used before because although it was possible to wind a thicker baked dough strip the cooling of the wound body would result in the formation of an extremely hard, unpalatable hollow body owing to the caramelization of the sugar. The hardness of such hollow body would be comparable to that of sugar crystals and it would be almost impossible to bite through it with the teeth.

Single-ply dough strips having a thickness up to 2 mm could obviously be embossed to shapes which are similar to low hollow wafers but for the reasons stated above such shapes would also be unusable and unpalatable.

It is an object of the invention to find a way in which hollow bodies, coherent portions of hollow bodies, portions of hollow bodies which are connected by flat webs or the like, cups, plates, flat discs, rolls and the like can be made from a starting material which has a thickness between 1 and 2 mm whereas the disadvantages which are inherent in the use of thick baked dough strips having a high sugar content are avoided.

This is accomplished in accordance with the invention in that pourable dough, preferably a wafer dough having a high sugar content, is continuously baked to form a continuous strip, which is plastically deformable when it is still warm, said strip when it is in a plastically deformable state is folded to form a laminated baked strip having at least two plies, and the laminated baked strip which is still warm and plastically deformable is processed further to form the desired products.

Products, such as hollow bodies, coherent portions of hollow bodies, portions of hollow bodies which are connected by flat webs or the like, plates, flat discs, rolls and the like, can be made from a dough having a high sugar content of 20 to 70 % of the dry weight of the dough in such a manner that the advantages which are afforded by the use of strips having a thickness of 0.2 to 0.5 mm compared to thicker strips are preserved.

The process according to the invention results in a baked strip which is of high quality and can be well deformed. The high quality is due to the fact that the

single-ply baked strip is folded to form a laminated baked strip and that high quality is preserved in the products made from the laminated baked strip because the latter can easily be deformed.

5 The novel laminated baked strip which is obtained in accordance with the invention has such a consistency that it can be formed into products which when cold have a lamellar structure, regardless of the wall thickness of the product. This means that
10 the plies of the laminate are bonded only by dot or line joints. As a result, the biting through or breaking of a multi-ply laminated baked strip or a product made therefrom will cause the several plies of the baked strip to break in succession. In case of an
15 increase of the wall thickness and of the number of plies of the laminated baked strip the forces required to bite through or break the strip will increase only slightly whereas a single-ply baked strip having the same thickness could not be bitten through.

20 According to a feature of the invention, the laminated baked strip can be processed further in accordance with the invention in that the laminated baked strip is wound on a winding mandrel in over-lapping helical convolutions in known manner
25 to form a continuous tubular hollow body.

According to another feature of the invention the laminated baked strip is embossed when it is in a plastically deformable state. Within the scope of the invention the desired product can be punched out of
30 the laminated baked strip by the embossing operation.

In accordance with a further feature of the invention the laminated baked strip is deformed between two-part embossing molds. Such embossing operation
35 can be used to form portions of hollow bodies in any desired shape.

Also in accordance with the invention the laminated baked strip is deformed by the embossing molds to form discrete or coherent portions of hollow bodies, such as mutually complementary
40 halves of hollow bodies.

In accordance with a further feature of the invention, the laminated baked strip is deformed by the embossing molds to form portions of hollow bodies
45 which are connected by flat webs or the like.

Also in accordance with the invention, those portions of the laminated baked strip which are contained in the embossing molds are permitted to harden in the embossing molds.

50 According to another feature of the invention, those portions of the laminated baked strip which are contained in the embossing molds are separated from each other before they are removed from the molds.

55 According to a further feature of the invention, the baked strip is folded along at least one longitudinal fold line. In dependence on the number of plies of the laminate, the resulting laminate baked strip has a smaller width than the originally baked strip. In that
60 case the laminated baked strip can be formed in an optimum width for the further processing of the laminated strip to form products of a given kind, which are to be made in accordance with the invention, and the wall thickness of such products
65 can be changed by a change of the number of plies

of the laminate whereas this will not alter the quality of the product. The number of plies of the laminate can be increased in that a correspondingly wider strip is baked whereas the succeeding production
70 line for the further processing to the products made according to the invention need not be altered in order to permit the processing of a wider strip because the width of the laminated baked strip according to the invention is not changed.

75 According to a further feature of the invention, the baked strip is folded along at least one longitudinal fold line and is subjected to longitudinal tension at the same time.

Another advantage will be afforded by the process
80 according to the invention when the baked strip is folded along longitudinal or transverse fold lines resides in that products having a particularly high quality will be obtained because for making a product having a predetermined wall thickness the
85 baked strip may be as thin as possible and the wall thickness can be obtained by the use of a maximum number of plies in the laminate.

In that case the baked strip according to the invention will afford the important advantage that
90 the crispness and the consistency possessed by the shaped product in a cold state can be varied in accordance with the requirements by a selection of the number of plies of the laminate whereas there will be no intolerable losses in quality if larger wall
95 thicknesses are used, as would be the case with a single-ply baked strip having the same thickness.

In accordance with the invention, the dough used to make the laminated baked strip preferably consists of a wafer dough which has a high sugar
100 content and owing to that high sugar content is plastically deformable when it is still in a hot to warm state. The process according to the invention can be used to process wafer doughs having a high sugar content of 15 to 70% or more of the dry weight
105 of the dough. A thick single-ply strip baked from such wafer doughs could still be deformed in a plastically deformable state but when cooled would have such a high breaking strength that the strip or a product made from the strip could not be bitten
110 through.

The invention will now be explained more in detail with reference to illustrative embodiments of apparatus for carrying out the process. These embodiments are shown in the drawings, in which

115 *Figure 1* is a diagrammatic side elevation showing a first embodiment of apparatus according to the invention, in which the laminated baked strip is wound to form a tubular hollow body.

Figure 2 is a top plan view showing the apparatus according to the invention in an embodiment which is similar to that of *Figure 1*.

Figure 3 is a perspective view showing apparatus according to the invention in which the baked strip is folded along a longitudinal fold line to form a
120 two-ply laminated baked strip, which extends at right angles to the non-folded baked strip.

Figure 4 is a perspective view that is similar to *Figure 3* and shows apparatus according to the invention in which the baked strip is folded along
130 longitudinal fold lines to form a four-ply laminated

baked strip.

Figure 5 is a perspective view from above showing a folding device in which the laminated baked strip remains substantially in the plane of travel of the

5 non-folded baked strip.

Figure 6 is a diagrammatic perspective view showing a folding device in which the baked strip is folded along longitudinal fold lines to form a laminated baked strip which has been turned through 90°

10 relative to the baked strip.

Figures 7a to 7c are three diagrammatic sectional views in planes which succeed in the direction of travel of the strip which is to be folded and are at right angles to that direction. These figures show a

15 folding device in which the laminated baked strip is not turned relative to the non-folded strip. To make the folding operation clearer, the spacings of the plies of the laminate and of the parts of the folding device are exaggerated.

20 Figure 8 is a diagrammatic perspective view showing how a baked strip is folded along longitudinal fold lines to form a three-ply laminated baked strip.

Figure 9 is a side elevation showing an embodiment of the apparatus according to the invention in which the laminated baked strip is processed further

25 in an embossing device.
Figure 10 is a side elevation which is similar Figure 9 and shows the apparatus according to the invention, which is provided with an embossing

30 device.

Figure 11 is a diagrammatic side elevation showing the folding of a baked strip along transverse fold lines to form a laminated baked strip.

35 Figure 12 is a top plan view showing an embodiment of one half of an embossing mold and

Figure 13 is a sectional view showing a detail of an embossing mold.

The invention will be explained with reference to illustrative embodiments in which the baking surfaces for baking a dough strip is formed by the shell

40 1 of a baking drum 2, the dough is applied to the shell 1 of the baking drum 2 by a pouring device, not shown, and is baked during the revolution of the drum, and the baked dough strip 3 is stripped from the shell 1 by a bladelike stripping device, not

45 shown. It will be understood that the pourable dough can alternatively be poured onto a horizontal baking surface formed by a revolving disk or revolving metal belt and the baked strip can be stripped

50 from such baking surface.
The device for stripping the baked strip 3 is succeeded by a closely spaced folding device 4, in which the baked strip 3 is folded to form a laminated baked strip 5. The folding device 4 is succeeded by a

55 device for the further processing of the laminated baked strip 5.

That device consists of a roll-forming device 6 in the illustrative embodiments shown in Figures 1 and 2 and of an embossing device in the illustrative

60 embodiments shown in Figures 9 and 10.

The laminated baked strip 4 can be formed from the baked strip 3 in that the latter is folded along at least one longitudinal fold line or along fold lines which extend transversely to its longitudinal direc-

65 tion.

The folding device 4 for folding along a longitudinal fold line to form a two-ply laminated baking strip comprises a guiding element 8, which extends in the longitudinal direction of the baked strip 3 and has a

70 guiding edge 8', which engages the web 3 and from one side extends through the path of the non-folded strip and extends beyond said path by about one-half of the width of the strip 3. As a result the strip 3 is folded into a U-shape. The two plies of the

75 laminated baked strip 5 are not forced against each other in the folding device 4. To ensure that the laminated baked strip 5 has a substantially horizontal orientation as it is fed to a succeeding shaping device, it is turned into the substantially hollow path

80 of the non-folded strip 3. The two plies of the laminate are forced against each other as the strip is turned and/or in the succeeding shaping device.

When it is desired to make a laminated baked strip having a plurality of fold lines, a plurality of guiding

85 elements 9, 10 or 11, 12, 13 will be provided on both sides of the path of the non-folded strip 3 and will be provided with guiding edges 9', 10' or 11', 12', 13', which extend through the path of the non-folded

90 strip 3 from one side. The guiding edges 9', 10' or 11', 12', 13' of said guiding elements 9, 10 or 11, 12, 13 disposed on one side of the path converge in the direction of travel of the strip 3 (Figure 4). The

resulting four-ply laminated baked strip 5 may be turned back into the path of the non-folded strip 3 if

95 this is desired.

In another embodiment of the folding device the same comprises of guiding element 14, which is

100 substantially C-shaped on cross-section and tapers in the direction of travel of the strip 3. During the folding operation the strip 3 slides along the guiding surface 14' formed by the inside surface of the

guiding element 14 and in dependence on the relative position of the flanges of the C-shaped

cross-section is folded to form a two-ply laminated

105 baked strip 5, in which the longitudinal edges of the strip 3 abut, or to form a three-ply laminated baked strip 5, in which the longitudinal edges of the strip 3 overlap.

The folding operation effected by means of the

110 folding device 4 may also be carried out by means of the folding device shown in Figure 6. In that

embodiment the two outer guiding elements are constituted by a channel member 15, particularly by

its flanges 16, 17. Another guiding element 18 is

115 provided at the center of the base of the channel member. Two further guiding elements 19, 20 are

provided on the open side of the channel member 15 and are interconnected by a pivot pin 21 and can be

120 swung into and out of the channel member 15. This embodiment facilitates the threading of the non-folded strip 3 into the folding device. When it is

desired to thread the strip 3, the guiding elements 19, 20 are swung out of the trough 15, the strip 3 is

125 inserted and the guiding elements are swung back into the channel member so that the strip is then

folded in W-shape.

In the folding device shown in Figures 7a to 7c, the

folding is effected in a direction which is parallel to the path of the non-folded strip 3. For this purpose,

130 strip-shaped portions of the strip 3 are gradually

raised from the path of the non-folded strip 3 and are guided to move toward and over each other. This is effected by guiding elements 22, 23, 24, which extend substantially parallel to the path of the non-folded strip and have guiding surfaces engaging the top and bottom sides of the strip to be folded, and lateral guiding edges also engaging the strip to be folded. A laminated baked strip obtained by such folding operation can be directly fed to a roll-forming or embossing device.

Figure 8 shows a folded strip which as been formed by a folding device which is similar to that of Figure 8. To permit a clearer illustration of the folded strip and of the folding operation, the folding device has been omitted in the drawing.

Figure 11 illustrates a folding along transverse fold lines. The baked strip 3 is continuously laid with transverse fold lines on an intermittently operated conveyor 25.

If the laminated baked strip 5 formed by a folding device 4 is to be processed further by an embossing operation, the laminated baked strip 5 may be fed into the opened embossing molds 26 or 26', 26" of an embossing device 7 and may be divided into sections corresponding to the embossing molds as the latter are closed. The embossed and severed sections of the laminated baked strip 5 are permitted to harden in the embossing molds 26, 26', 26" while the latter are closed, and are then removed from the molds. The embossing molds 25 may be connected to form a revolving chain (Figure 10), or each set of embossing mold halves 26' or 26" may form a separate chain (Figure 9). When the embossing molds are closed, the height of the mold cavity will correspond to the thickness of the product made from the laminated baked strip. A local adhesion or welding between adjacent plies of the laminate may be achieved in that dot- or line-shaped elevations 27 or 28 are provided, e.g., on the upper half of each embossing mold, and protrude into the mold cavity. In the formation of portions of hollow bodies these elevations 28 are suitably disposed at those portions of the embossing molds which correspond to the rims of the portions of hollow bodies. Discrete dot-shaped elevations 28 are provided in the embossing molds at those portions which serve to shape the flat webs by which the portions of hollow bodies are connected so that an adequate strength will be imparted to the laminated baked strip in these portions.

Owing to the elevations 28 provided in the embossing molds, the laminated baked strip is subjected to increased pressure in discrete, dot- or line-shaped areas as it is embossed so that confronting surfaces of adjacent plies of the resulting product will be bonded by dot or line joints and unbonded in other areas. A similar effect will be achieved if the baked strip is formed with elevations and is folded so that adjacent plies of the laminated baked strip contact each other at said elevations and will be subjected to increased pressure in discrete, dot- or lined-shaped areas when pressure is subsequently applied to the laminated baked strip in any desired manner.

In the folding devices used to fold the baked strip along at least one longitudinal fold line, the strip 3 is

subjected to longitudinal tension throughout the folding operation.

CLAIMS

70

1. A process of making products, such as hollow bodies, coherent portions of hollow bodies, portions of hollow bodies which are connected by flat webs or the like, cups, flat discs, rolls and the like, from a baked strip, preferably from a wafer strip, characterized in that pourable dough, preferably a wafer dough having a high sugar content, is continuously baked to form a continuous strip, which is plastically deformable when it is still warm, said strip when it is in a plastically deformable state is folded to form a laminated baked strip having at least two plies, and the laminated baked strip which is still warm and plastically deformable is processed further to form the desired products.

85

2. A process according to claim 1, characterized in that the laminated baked strip is wound on a winding mandrel in overlapping helical convolutions in known manner to form a continuous tubular hollow body.

90

3. A process according to claim 1, characterized in that the laminated baked strip is embossed when it is in a plastically deformable state.

95

4. A process according to claim 3, characterized in that the laminated baked strip is punched by the embossing operation to sever discrete products from the laminated baked strip.

100

5. A process according to claim 3, characterized in that the baked strip is deformed in two-part embossing molds.

105

6. A process according to claim 5, characterized in that the laminated baked strip is deformed by the embossing molds to form discrete or coherent portions of hollow bodies.

110

7. A process according to claim 5, characterized in that the laminated baked strip is deformed by the embossing molds to form portions of hollow bodies which are connected by flat webs or the like.

115

8. A process according to any of claims 5 to 7, characterized in that those portions of the laminated baked strip which are contained in the embossing molds are permitted to harden in the embossing molds.

120

9. A process according to any of claims 5 to 8, characterized in that those portions of the laminated baked strip which are contained in the embossing molds are separated from each other before they are removed from the molds.

125

10. A process according to any of claims 3 to 9 characterized in that the several plies of the laminated baked strip are adhesively bonded or welded to form discrete dot and/or line joints by the local application of increased pressure during the embossing operation.

130

11. A process according to claim 10, characterized in that the plies of the laminated baked strip are adhesively bonded or welded in the region of the shaped products and, if desired, in the region of the webs or the like connecting said shaped products.

12. A process according to any of claims 1 to 11, characterized in that the baked strip is folded along

at least one longitudinal fold line.

13. A process according to claim 12, characterized in that the baked strip is subjected to longitudinal tension as it is folded along at least one longitudinal fold line.

14. A process according to any of claims 1 to 11, characterized in that the baked strip is folded along transverse fold lines.

15. A process according to any of claims 12 to 14, characterized in that several plies of the laminated baked strip are formed in that strip-shaped portions of the baked strip are simultaneously moved to positions in which they face each other.

16. A process according to any of claims 12 to 14, characterized in that several plies of the laminated baked strip are formed in that strip-shaped portions of the baked strip are successively super-imposed on each other.

17. A process according to any of claims 12 to 16, characterized in that the baked strip is continuously moved as it is folded.

18. A process according to claim 17, characterized in that the plies of the laminated baked strip are formed in that strip-shaped portions of the baked strip are gradually moved out of the path of travel of the baked strip and are approached to each other and caused to overlap each other at least in part.

19. A process according to claim 18, characterized in that longitudinally extending strip-shaped portions of the baked strip which laterally adjoin each other are moved to overlap each other.

20. A process according to claim 18, characterized in that strip-shaped portions of the baked strip which are laterally spaced apart and are preferably separated by at least one strip-shaped portion are moved to directly overlap each other.

21. A process according to claim 17, characterized in that the plies of the laminated baked strip are formed in that the edges of one of the laterally adjoining strip-shaped portions of the baked strip are gradually displaced relative to each other transversely to the direction of travel of the strip and the strip-shaped portions are moved toward each other.

22. A process according to any of claims 17 to 21, characterized in that each ply of the laminated baked strip is formed from a plurality of strip-shaped portions of the baked strip, which portions have preferably the same width.

23. A process according to any of claims 17 to 21, characterized in that the plies of the laminated baked strip are formed from strip-shaped portions of the baked strip, which strip-shaped portions differ in width.

24. A process according to any of claims 17 to 21 and 23, characterized in that each ply of the laminated baked strip is formed from a single strip-shaped portions of the baked strip.

25. A process according to any of the preceding claims, characterized in that the plies of the laminated baked strip are forced against each other before the laminated baked strip is deformed and, if desired, after particulate solids have been strewn between the plies.

26. A process according to any of claims 1 to 25, characterized in that the plies of the laminated baked

strip are not forced against each other before the laminated baked strip is deformed.

27. A process according to any of claims 1 to 26, characterized in that several plies of the laminated baked strip are adhesively bonded or welded to form discrete dot and/or line joints by the local application of increased pressure whereas they are caused to remain unbonded in areas other than said joints.

28. Apparatus for carrying out a process according to any of the preceding claims, comprising a baking oven for baking the baked strip, characterized in that a device for removing the strip from the baking surface of the baking oven is succeeded by a folding device for laminating the strip and the folding device is succeeded by a device for the further processing of the laminated baked strip when the same is still plastically deformable, such as a roll-forming device, an embossing device, a punching device, or the like.

29. Apparatus according to claim 27, characterized in that the folding device comprises at least one guiding element, which extends in the direction of travel of the baked strip and serves to guide the baked strip and has at least one guiding surface and/or guiding edge, which at least in part of its extent engages the baked strip and extends at an acute angle to the direction of travel or path of travel of the non-folded baked strip.

30. Apparatus according to claim 29, characterized in that the guiding element is substantially C-shaped in cross-section and tapers in the direction of travel of the baked strip, the guiding surface is formed on the inside surface of the guiding element, measured transversely to the direction of travel, preferably decreases to a width which corresponds to the width of the laminated baked strip.

31. Apparatus according to claim 29, characterized in that a plurality of guiding elements are provided, which have substantially planar guiding surfaces, which converge in wedge shape in the direction of travel of the baked strip and are laterally defined by guiding edges.

32. Apparatus according to claim 31, characterized in that the guiding surfaces of at least two guiding elements extend in a plane and have converging lateral guiding edges.

33. Apparatus according to claim 31, characterized in that the guiding edges of the guiding elements are arranged one beside the other and/or one over the other and at least one of the associated guiding edges cross each other.

34. Apparatus according to any of claims 29 to 33, characterized in that the guiding surfaces extend at least in part substantially at right angles to the path of the non-folded baked strip.

35. Apparatus according to any of claims 29 to 33, characterized in that at least a portion of at least one guiding surface is substantially at right angles to a plane that extends at right angles to the path of the non-folded baked strip and in the direction of travel thereof.

36. Apparatus according to any of claims 29 to 33, characterized in that the folding device comprises two guiding elements, which are comblike in cross-section and extend in the direction of travel of

the non-folded baked strip and have guiding surfaces which are staggered when viewed in cross-section, and the guiding surfaces of one guiding element extend at least in part into the spaces
5 between the guiding surfaces of the other guiding element.

37. Apparatus according to any of claims 29 to 36, characterized in that at least portions of the guiding elements are adapted to be displaced and/or
10 pivotally moved transversely to the path of the baked strip.

38. Apparatus according to any of claims 29 to 37, characterized in that the folding device is heatable.

15 39. Apparatus according to any of claims 28 to 38, characterized in that the device for the further processing of the laminated baked strip when it is still plastically deformable comprises an embossing device having two-part embossing molds and when
20 the embossing mold is closed the confronting sides of the halves of the mold define a mold cavity which corresponds to the desired product.

40. Apparatus according to claim 39, characterized in that at least one of the halves of each
25 embossing mold is provided with one or more dot- and/or line-shaped projections, which protrude into the mold cavity and serve to apply a locally increased embossing pressure for bonding the plies of the laminate to each other.

30 41. A laminated baked product comprising at least two plies of baked dough, characterized in that confronting surfaces of adjacent plies of said product are bonded to each other by dot or line joints and are unbonded in other areas.

35 42. A laminated baked product according to claim 41, characterized in that said baked dough has a sugar content of 20 to 70% of the dry weight of the dough.